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Before the  
Federal Communications Commission  
Washington, D.C. 20554

DEC 17 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Advanced Television Systems  
and Their Impact Upon the  
Existing Television Broadcast  
Service

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MM Docket No. 87-268

TO: The Commission

**COMMENTS SUBMITTED BY  
THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC.**

December 17, 1997

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The Commission has requested comment on the *ex parte* submission of the Association for Maximum Service Television, Inc. ("MSTV") and other broadcast organizations (the "MSTV submission") and that of the Association of Local Television Stations, Inc. ("ALTV") (the "ALTV submission").<sup>1</sup> The MSTV submission supplemented the petitions for reconsideration in this docket by identifying two systemic problems in the table of DTV allotments/assignments (the "DTV Table")<sup>2</sup> and showing how the Commission could ameliorate these problems. The ALTV submission proposes a new scheme to enable DTV stations to increase power provided that certain interference criteria are met.

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<sup>1</sup> See FCC Seeks Comment on Filings Addressing Digital TV Allotments, Public Notice (December 2, 1997) (the "Notice").

<sup>2</sup> Appendix B to In re. Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, Sixth Report and Order, 7 Com. Reg. (P & F) 994 (1997) ("Sixth Report and Order").

# **I. MSTV SUBMISSION**

## **A. THE NEED FOR SYSTEMIC CHANGES BEFORE BUILD-OUT**

The Notice asks whether the issues raised by the MSTV submission are "more appropriately handled on an individual case-by-case basis or through a new Table". The bottom line is that, in the spectrum-congested areas of the country, there are no DTV channels to spare. That means that changing one DTV assignment (whether to put more distance between DTV adjacent channels or to reduce other causes of excessive interference) necessitates changes throughout the market or even the region. Therefore, a purely case-by-case approach to DTV channel changes in the congested markets is not feasible.<sup>3</sup> But it would be going too far at this point to substitute a "new Table" for the DTV Table; the industry petition for partial reconsideration and the November 20 MSTV submission explicitly rejected such a step. To the contrary, the signatories to both pleadings accepted the

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<sup>3</sup> See, e.g., Petition for Clarification and Partial Reconsideration of the Fifth and Sixth Reports and Orders Submitted by MSTV, the Broadcasters Caucus and Other Broadcasters, MM Docket No. 87-268 (June 13, 1997) at 15-16 ("Broadcasters' Petition"). Of course, it is understood that the MSTV submission does not address all problems in the DTV Table and that other station-specific adjustments may be appropriate both before and after the DTV Table is finalized. It was apparent from early in this proceeding that the Commission would need to consider both systemic and ad hoc changes to any allotment/assignment table before it was adopted. It was also apparent that additional changes would need to be made after adoption and, for this reason, the industry has urged the creation of private coordinating committees to assist the Commission in future adjustments. See, e.g., Broadcasters' Proposed ATV Allotment/Assignment Approach (Jan. 13, 1995); Joint Broadcaster Comments to the Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268 (Nov. 22, 1997) at 47-53; Broadcasters Caucus Reply to Comments on the Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268 (Jan. 24, 1997) at 18-20; Broadcasters Caucus Petition for Further Rule Making, MM Docket No. 87-268 (Jan. 10, 1997); Broadcasters' Petition at 23-26; and Reply to Oppositions to Petitions for Reconsideration of the Fifth and Sixth Reports and Orders Submitted by MSTV and the National Association of Broadcasters, MM Docket No. 87-268 (July 31, 1997) at 10-11 ("MSTV and NAB Reply to Oppositions").

Commission's methodology and the lion's share of the DTV Table assignments.<sup>4</sup> We restate here our endorsement of that same approach.

The need for systemic, rather than piecemeal, adjustments in the congested markets was foreordained by the Commission's use of neutral engineering principles to construct the DTV Table -- principles that broadcasters endorsed. According to those principles, DTV channels are assigned in a way that replicates analog service areas and achieves other public policy goals.<sup>5</sup> It is not possible to both adhere to these neutral engineering principles and to take a scattershot approach to DTV channel changes in the congested markets. Changes that can solve only one station's problem at the expense of another will violate these neutral principles and should be discouraged.

The MSTV submission identifies two sets of problems -- the high incidence of interference in the Northeast, Great Lakes and California coastal regions that was the nub of many petitions for reconsideration,<sup>6</sup> and the newly discovered DTV-to-DTV adjacent channel

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<sup>4</sup> See Broadcasters' Petition at 3-4 and MSTV submission at 4-5. See also Comment on and Opposition to Petitions for Reconsideration of the Fifth and Sixth Reports and Orders Submitted by MSTV and the Broadcasters Caucus, MM Docket No. 87-268 (July 18, 1997) at 3-4.

<sup>5</sup> The Broadcasters Caucus, which developed the software underlying the MSTV submission and past industry comments, has long supported neutral engineering principles. See, e.g., Broadcasters' Proposed ATV Allotment/Assignment Approach, MM Docket No. 87-268 (Jan. 13, 1995) at 9 and 17; see also Broadcasters' Caucus Reply to Comments on the Sixth Further Notice of Proposed Rulemaking, MM Docket No. 87-268 (Jan. 24, 1997) at 14.

<sup>6</sup> See, e.g., Broadcasters' Petition at 8 and 21; see also Petitions for Reconsideration of ABC, Inc., CBS Inc., National Broadcasting Company, Inc., Fox Television Stations, Inc., Pulitzer Broadcasting Company, Tribune Company, and Midwest Television, Inc. all filed in MM Docket No. 87-268 (June 13, 1997).

interference.<sup>7</sup> The 357 changes to the DTV Table contained in the MSTV submission ameliorate the most egregious interference problems that arise in the three regions and as a result of DTV-to-DTV channel adjacencies. If either of these two sets of problems is addressed at all, they must be addressed together, especially in the congested markets. For example, if the Commission decided to reassign a short-spaced DTV channel in Hartford, it might well find that the new channel made the interference problems on the East Coast even worse. By the same token, selecting a new channel for a New York station that would otherwise suffer cochannel interference from a Philadelphia station would not be sensible if the selection created another short-spaced DTV-to-DTV adjacent channel pair. Undoubtedly, the MSTV submission could have contained fewer changes, but only at the cost of more stations being harmed (and thus risking more controversy and delay) and more stations being assigned channels in the 60-69 band.

The Notice asks whether the MSTV submission reflects "full industry" agreement. No DTV table of allotments/assignments will ever achieve full industry agreement. With more than 1600 licensees involved and trade-offs necessarily being made between coverage and interference as well as channel numbers and signal performance, some stations will inevitably feel injured by the trades. MSTV and others in the broadcast industry have made significant effort to reach out to the industry and provide constructive feedback with respect to the DTV allotment/assignments proposed in the Sixth Further Notice of

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<sup>7</sup> We brought this discovery to the Commission's attention as soon as the discovery was published. See Comment on and Opposition to Petitions for Reconsideration of the Fifth and Sixth Reports and Orders Submitted by the Association for Maximum Service Television, Inc. and the Broadcasters Caucus, MM Docket No. 87-268 (July 18, 1997) ("Broadcasters' Opposition"); MSTV and NAB Reply to Oppositions.

Proposed Rulemaking<sup>8</sup> and then adopted in the Sixth Report and Order.<sup>9</sup> The MSTV submission now under consideration is a direct result of those earlier efforts at industry coordination.

**B. USE OF CHANNELS 60-69**

The Notice asks whether making additional DTV assignments in channels 60-69 "would be consistent with" the Commission's obligations to reallocate 24 MHz or four channels within 60-69 to public safety services pursuant to the Balanced Budget Act of 1997.<sup>10</sup> As discussed below, the Budget Act itself requires the protection of DTV and analog stations in the 60-69 band and, in doing so, recognizes that not every hertz in every market will be available for public safety use during the transition. Moreover, there is no evidence that Congress assumed any particular number of television incumbents in the 60-69 band. In fact, all evidence and the Commission's own statements indicated that the number of stations in 60-69 would fluctuate.

The Budget Act requires the Commission, by January 1, 1998, to allocate 24 MHz (or four television channels) of spectrum between 746 MHz and 806 MHz "for public

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<sup>8</sup> See, e.g., Broadcasters' Comments on the Sixth Notice of Proposed Rulemaking, MM Docket No. 87-268 (Nov. 22, 1996) at App. A. This response involved more than a filing with the Commission. It involved more than 40 meetings around the country and a sophisticated regional network of engineers and station managers that solicited feedback from stations and educated the industry about the Commission's approach. The extent to which this effort produced unity within the industry can only be judged by the petitions for reconsideration that were not filed and the requests for channel changes and build-out delays that will not be submitted.

<sup>9</sup> See, e.g., Broadcasters' Petition; Broadcasters' Opposition.

<sup>10</sup> See Balanced Budget Act of 1997, P.L. No. 105-33 (amending Title III of the Communications Act by adding section 337, entitled "Allocation and Assignment of New Public Safety Services Licenses and Commercial Licenses") (the "Budget Act").

safety services according to the terms and conditions established by the Commission, in consultation with the Secretary of Commerce and the Attorney General."<sup>11</sup> That reallocation -- and the Commission's central obligation under the Budget Act -- is well underway and the MSTV submission does not disturb that process.<sup>12</sup> Congress also required the Commission to commence assignment of the licenses for public safety services by September 30, 1998.<sup>13</sup> It is expected that this will take place notwithstanding the nearly 100 analog television stations that will still be using channels 60-69. Presumably, the assignments will also take place without regard to whether there are 15 or 50 DTV stations incumbent in those channels around the country.<sup>14</sup>

Congress instructed the Commission that the assignment of licenses to specific public safety entities in any given locale must not interfere with existing analog or new digital television operations. Congress set forth a number of conditions that the Commission must observe in granting public safety service applications. Most generally, such applications may be granted only if the "requested use is technically feasible without causing harmful

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<sup>11</sup> 47 U.S.C. § 337(a)(1).

<sup>12</sup> See *In re Reallocation of Television Channels 60-69, the 746-806 MHz Band*, ET Docket 97-157 (adopted July 9, 1997, rel. July 10, 1997) (the "Channel 60-69 Reallocation"). If the Commission were to act on some of the recommendations in the MSTV submission, it might indeed have to make more DTV assignments in channels 60-69. In most cases, such assignments would not even interfere with a potential public safety licensee's use of a channel in that band. But even if such assignments did reduce the utility of the spectrum to public safety licensees, the assignments would not impede the reallocation. Furthermore, it is reasonable to assume that Congress contemplated and accepted this eventuality.

<sup>13</sup> 47 U.S.C. § 337(b)(1).

<sup>14</sup> The Community Broadcasters Association recently distinguished the Commission's allocation and assignment obligations under the Budget Act. See *Ex Parte* Supplement to CBA's Petition for Reconsideration, MM Docket No. 87-268 (Dec. 15, 1997).

interference to other spectrum users entitled to protection from such interference under the Commission's regulations."<sup>15</sup> In establishing such rules, Congress required the Commission to "establish any additional technical restrictions necessary to protect full-service analog television service and digital television service during a transition to digital television service."<sup>16</sup>

Nowhere does the Budget Act limit the number of television stations that must be protected. Thus, on its face, the Budget Act takes no position on the number of DTV assignments that are made in channels 60-69. When the Budget Act was enacted, it would have been clear to any legislator or other observer that the number of DTV assignments on these channels would not remain static. First, more than 230 petitions for reconsideration of the Sixth Report and Order had been filed, including the Broadcasters' Petition that expressly requested additional assignments in channels 60-69 and at least 36 other petitions that involved the assignment of an additional DTV station to those channels.<sup>17</sup> Second, the Commission had issued a notice of proposed rulemaking in which it stated that "our decision on [the DTV petitions for reconsideration] could affect the [public safety allocation]. If any

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<sup>15</sup> 47 U.S.C. § 337(c)(1)(B). The Commission too asserted that the public safety allocation was consistent with the commitment made in the DTV proceeding that "all existing analog and DTV full service broadcast operations on channels 60-69 will be fully protected during the transition, which is targeted for completion in the year 2006." *See* Channel 60-69 Reallocation, ¶¶ 6 (*citing* Sixth Report and Order, ¶ 80 and Fifth Report and Order, ¶¶ 99-100), 17 and 21.

<sup>16</sup> 47 U.S.C. § 337(d)(2). *See also* H.R. Rep. No. 105-217 at 580 (1997) (Conference report on the Balanced Budget Act of 1997). The Conference Report states "[t]he conferees expect that, for the period during the transition, the Commission will ensure that full-power analog and digital television licensees will operate free of interference from public safety service licensees and conversely, that public safety service licensees will operate free of interference from analog and digital television licensees."

<sup>17</sup> *See* Broadcasters' Petition at 22; Broadcasters' Opposition at 31.



additional DTV full service allotments are made as a result of these petitions, they would be afforded full protection during the DTV transition period."<sup>18</sup>

Congress acted with clear knowledge that analog and digital television stations would operate in channels 60-69 and with constructive knowledge that the number of such stations might fluctuate. There was never an expectation that, at the end of this year when four channels are allocated to public safety services, all four channels would be usable by public safety in all jurisdictions. The Conference Report stated that the conferees expected that in congested markets there would not be 24 MHz of spectrum in 60-69 for public safety.<sup>19</sup> On the contrary, an expectation was expressed in both legislative and administrative arenas, that the public safety allocation would not interfere with television operations or the speedy transition to digital television.

## **II. ALTV SUBMISSION**

The ALTV proposal addresses what the Notice refers to as the "UHF power problem." Specifically, this is the concern of many UHF broadcasters assigned UHF DTV channels ("U-to-U stations") that there is too great a differential in assigned power levels between U-to-U stations on the one hand and the DTV stations of VHF broadcasters assigned UHF DTV channels ("V-to-U stations") on the other hand.<sup>20</sup> A handful of different proposals, including an earlier one by ALTV, are now before the Commission to address this

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<sup>18</sup> Channel 60-69 Reallocation, ¶ 1.

<sup>19</sup> See H.R. Rep. No. 105-217 at 579 (1997).

<sup>20</sup> This difference can explained by the attempt to replicate the smaller analog service areas of the UHF broadcasters and the larger analog service areas of the VHF broadcasters in the DTV environment.

concern.<sup>21</sup> In addition, MSTV took the lead in submitting to the Commission on January 24, 1997 a compromise proposal that would have at least temporarily reduced the power differential between U-to-U stations and V-to-U stations. That proposal also expressly endorsed the use of an antenna beam tilt approach as one way to focus power where U-to-U stations want it most.<sup>22</sup>

Although acknowledging the industry compromise proposal, the ALTV proposal differs in significant ways. To the extent that the proposal diverges from the compromise, we are concerned that the new concepts it introduces and the assertions it makes raise serious technical and other issues. For example:

- Use of the beam tilt antenna as one tool to solve potential coverage and interference problems is beneficial if used with proper engineering practice. But the ALTV proposal appears to permit an excessive ratio of power at the radio horizon to power within the service area.
- The ALTV proposal's placement of the burden of proof for detecting and proving interference on stations suffering interference might result in undue interference and should not be accepted.
- The proposed scheme for proving interference, including field measurements, is imprecise and cannot be implemented as it is currently written.
- The ALTV proposal's use of the DMA instead of the Grade B contour could result in confusion and destruction of some stations' valued service to the

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<sup>21</sup> See, e.g., Petition for Reconsideration of Association of Local Television Stations, Inc., MM Docket No. 87-268 (June 11, 1997); Petition for Reconsideration of Sinclair Broadcasting Group, Inc., MM Docket No. 87-268 (June 13, 1997); Petition for Partial Reconsideration of the Fifth Report and Order and of the Sixth Report and Order, MM Docket No. 87-268 (June 13, 1997); Opposition to Petitions for Reconsideration of the Fifth Report and Order and of the Sixth Report and Order, MM Docket No. 87-268 (July 18, 1997).

<sup>22</sup> See Broadcasters Caucus Reply to Comments to the Sixth Further Notice of Proposed Rulemaking, MM Docket 87-268 (Jan. 24, 1997) at 12-16. In Commission did not adopt the proposal in the Sixth Report and Order, but instead adopted a permanent power minimum of 50 kW and a permanent power cap of 1000 kW to address the UHF power concern.

public.

Despite these shortcomings, the ALTV proposal appropriately explores the UHF power issue. MSTV is committed to continuing to work on this issue. Fortunately, as ALTV acknowledges, such work need not be completed before the DTV Table is finalized. MSTV has stated its intention to work towards the development of a *de minimis* interference standard.<sup>23</sup> That work is underway and should contribute to resolution of the UHF power issue in the future.

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We urge the Commission to take into account the points made here and in the MSTV submission and finalize the DTV Table expeditiously.

Respectfully submitted,



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<sup>23</sup> See MSTV submission at 10.